ELSEVIER

International Journal of Mass Spectrometry 245 (2005) iii–iv

International Journal of Mass Spectrometry

www.elsevier.com/locate/ijms

CONTENTS

Structure determination of gaseous metal and semi-metal cluster ions by ion mobility spectrometry
Patrick Weis (Germany) **1**

Rovibronic photoionization dynamics of asymmetric-top molecules
S. Willitsch and F. Merkt (Switzerland, UK) **14**

Cross sections for ionization of Mo and Mo^+ by electron impact
Duck-Hee Kwon, Yong-Joo Rhee and Yong-Ki Kim (Republic of Korea, USA) **26**

Absolute measurements of neodymium isotopic abundances and atomic weight by MC-ICPMS
Motian Zhao, Tao Zhou, Jun Wang, Hai Lu and Fang Xiang (China) **36**

Electrospray ionization mass spectra of phosphacoumarin derivatives
Xueshu Li, Hua Fu, Yuyang Jiang and Yufen Zhao (PR China) **41**

Multi-ion emission from large and massive keV cluster impacts
R.D. Rickman, S.V. Verkhoturov, G.J. Hager and E.A. Schweikert (USA) **48**

Loss of water and hydrogen atom from the *n*-propanol molecular cation: A theoretical study
Joong Chul Choe (Republic of Korea) **53**

Photocatalytic degradation of methylene blue on nanocrystalline TiO_2: Surface mass spectrometry of reaction intermediates
Hubert Gnaser, Michael R. Savina, Wallis F. Calaway, C. Emil Tripa, Igor V. Veryovkin and Michael J. Pellin (Germany, USA) **61**

Identification of ion fragments produced from thymine and deuterated thymine by low energy ion impact in films and electron impact in the gas phase
Marjorie Imhoff, Zongwu Deng and Michael A. Huels (Canada) **68**

On-line analysis of organic compounds in diesel exhaust using a proton transfer reaction mass spectrometer (PTR-MS)
B.T. Jobson, M.L. Alexander, G.D. Maupin and G.G. Muntean (USA) **78**

Formation of the negative cluster ions in a Knudsen cell at low temperatures
S.V. Abramov, N.S. Chilingarov, J.V. Rau, A.Ya. Borschevsky and L.N. Sidorov (Russia) **90**

Molybdenum isotope ratio measurements on geological samples by MC-ICPMS
Dmitry Malinovsky, Ilia Rodushkin, Douglas C. Baxter, Johan Ingri and Björn Öhlander (Sweden) **94**

Abstracted/Contents in:
Chem. Abstr.; Curr. Contents, Phys. Chem. Earth Sci.;
Embase/Excerpta Medica; INSPEC; Mass Spectrom. Bull.; PASCAL/CNRS

(CONTENTS CONTINUED)

Author index, vol. 245 ..... **108**
Subject index, vol. 245 ..... **109**
Guide for Authors ..... **I**
Forthcoming articles ..... **VII**

ELSEVIER

International Journal of Mass Spectrometry 245 (2005) 108

International Journal of Mass Spectrometry

www.elsevier.com/locate/ijms

Author index Volume 245

Abramov, S.V., 90
Alexander, M.L., 78

Baxter, D.C., 94
Borschevsky, A.Ya., 90

Calaway, W.F., 61
Chilingarov, N.S., 90
Choe, J.C., 53

Deng, Z., 68

Fu, H., 41

Gnaser, H., 61

Hager, G.J., 48
Huels, M.A., 68

Imhoff, M., 68
Ingri, J., 94

Jiang, Y., 41
Jobson, B.T., 78

Kim, Y.-K., 26
Kwon, D.-H., 26

Li, X., 41
Lu, H., 36

Malinovsky, D., 94
Maupin, G.D., 78
Merkt, F., 14
Muntean, G.G., 78

Öhlander, B., 94

Pellin, M.J., 61

Rau, J.V., 90
Rhee, Y.-J., 26

Rickman, R.D., 48
Rodushkin, I., 94

Savina, M.R., 61
Schweikert, E.A., 48
Sidorov, L.N., 90

Tripa, C.E., 61

Verkhoturov, S.V., 48
Veryovkin, I.V., 61

Wang, J., 36
Weis, P., 1
Willitsch, S., 14

Xiang, F., 36

Zhao, M., 36
Zhao, Y., 41
Zhou, T., 36

doi:10.1016/S1387-3806(05)00209-5

ELSEVIER

International Journal of Mass Spectrometry 245 (2005) 109–110

International Journal of Mass Spectrometry

www.elsevier.com/locate/ijms

Subject index Volume 245

Aluminum fluoride
Formation of the negative cluster ions in a Knudsen cell at low temperatures, 90
Atomic weight
Absolute measurements of neodymium isotopic abundances and atomic weight by MC-ICPMS, 36
Autoioniztion
Cross sections for ionization of Mo and Mo^+ by electron impact, 26

Cerium fluoride
Formation of the negative cluster ions in a Knudsen cell at low temperatures, 90
Chemical ionization
On-line analysis of organic compounds in diesel exhaust using a proton transfer reaction mass spectrometer (PTR-MS), 78
Cluster
Structure determination of gaseous metal and semi-metal cluster ions by ion mobility spectrometry, 1
Condensed phase
Identification of ion fragments produced from thymine and deuterated thymine by low energy ion impact in films and electron impact in the gas phase, 68

DFT calculation
Loss of water and hydrogen atom from the *n*-propanol molecular cation: A theoretical study, 53
Diesel exhaust
On-line analysis of organic compounds in diesel exhaust using a proton transfer reaction mass spectrometer (PTR-MS), 78
DNA bases
Identification of ion fragments produced from thymine and deuterated thymine by low energy ion impact in films and electron impact in the gas phase, 68

ESI-MS
Electrospray ionization mass spectra of phosphacoumarin derivatives, 41

Fractionation
Molybdenum isotope ratio measurements on geological samples by MC-ICPMS, 94
Fragmentation pathway
Electrospray ionization mass spectra of phosphacoumarin derivatives, 41

Gold clusters
Multi-ion emission from large and massive keV cluster impacts, 48

High Rydberg states
Rovibronic photoionization dynamics of asymmetric-top molecules, 14

Hydrocarbons
On-line analysis of organic compounds in diesel exhaust using a proton transfer reaction mass spectrometer (PTR-MS), 78
Hyolite
Formation of the negative cluster ions in a Knudsen cell at low temperatures, 90

Intact molecules
Multi-ion emission from large and massive keV cluster impacts, 48
Ion desorption
Identification of ion fragments produced from thymine and deuterated thymine by low energy ion impact in films and electron impact in the gas phase, 68
Ion impact
Identification of ion fragments produced from thymine and deuterated thymine by low energy ion impact in films and electron impact in the gas phase, 68
Ion pressure
Formation of the negative cluster ions in a Knudsen cell at low temperatures, 90
Ion
Structure determination of gaseous metal and semi-metal cluster ions by ion mobility spectrometry, 1
Ionization cross sections
Cross sections for ionization of Mo and Mo^+ by electron impact, 26
Ion-molecular equilibrium
Formation of the negative cluster ions in a Knudsen cell at low temperatures, 90
Isotope effect
Loss of water and hydrogen atom from the *n*-propanol molecular cation: A theoretical study, 53
Isotopic abundance
Absolute measurements of neodymium isotopic abundances and atomic weight by MC-ICPMS, 36

MC-ICPMS
Absolute measurements of neodymium isotopic abundances and atomic weight by MC-ICPMS, 36
Molybdenum isotope ratio measurements on geological samples by MC-ICPMS, 94
Metal
Structure determination of gaseous metal and semi-metal cluster ions by ion mobility spectrometry, 1
Metastable ion
Loss of water and hydrogen atom from the *n*-propanol molecular cation: A theoretical study, 53
Methylene blue
Photocatalytic degradation of methylene blue on nanocrystalline TiO_2: Surface mass spectrometry of reaction intermediates, 61
Mo and Mo^+
Cross sections for ionization of Mo and Mo^+ by electron impact, 26

doi:10.1016/S1387-3806(05)00210-1

Mo stable isotopes
Molybdenum isotope ratio measurements on geological samples by MC-ICPMS, 94
Mobility
Structure determination of gaseous metal and semi-metal cluster ions by ion mobility spectrometry, 1
Molecular cations
Rovibronic photoionization dynamics of asymmetric-top molecules, 14
Multi-ion emission
Multi-ion emission from large and massive keV cluster impacts, 48

Nanocrystalline TiO_2
Photocatalytic degradation of methylene blue on nanocrystalline TiO_2: Surface mass spectrometry of reaction intermediates, 61
Neodymium
Absolute measurements of neodymium isotopic abundances and atomic weight by MC-ICPMS, 36

Phosphacoumarin
Electrospray ionization mass spectra of phosphacoumarin derivatives, 41
Photocatalysis
Photocatalytic degradation of methylene blue on nanocrystalline TiO_2: Surface mass spectrometry of reaction intermediates, 61
Photoelectron spectroscopy
Rovibronic photoionization dynamics of asymmetric-top molecules, 14
Photoionization
Rovibronic photoionization dynamics of asymmetric-top molecules, 14
n-Propanol ion
Loss of water and hydrogen atom from the *n*-propanol molecular cation: A theoretical study, 53
Proton transfer
On-line analysis of organic compounds in diesel exhaust using a proton transfer reaction mass spectrometer (PTR-MS), 78

PTR-MS
On-line analysis of organic compounds in diesel exhaust using a proton transfer reaction mass spectrometer (PTR-MS), 78

RRKM calculation
Loss of water and hydrogen atom from the *n*-propanol molecular cation: A theoretical study, 53

Secondary ion mass spectrometry
Multi-ion emission from large and massive keV cluster impacts, 48
Sediments
Molybdenum isotope ratio measurements on geological samples by MC-ICPMS, 94
Superionic conductor
Formation of the negative cluster ions in a Knudsen cell at low temperatures, 90
Surface mass spectrometry
Photocatalytic degradation of methylene blue on nanocrystalline TiO_2: Surface mass spectrometry of reaction intermediates, 61

Thermal ionization
Formation of the negative cluster ions in a Knudsen cell at low temperatures, 90
Thermionic emission
Formation of the negative cluster ions in a Knudsen cell at low temperatures, 90

VOC
On-line analysis of organic compounds in diesel exhaust using a proton transfer reaction mass spectrometer (PTR-MS), 78

ZEKE
Rovibronic photoionization dynamics of asymmetric-top molecules, 14